

Docket No.: 023949.0104PTUS (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Chaoqiang Liu et al.

Application No.: 10/578581

Confirmation No.:

Filed: May 5, 2006

Art Unit: N/A

For: DOCUMENT IMAGE ENCODING/DECODING

Examiner: Not Yet Assigned

## INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir.

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08/AB. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed within three months of the U.S. filing date (37 CFR 1.97(b)(1)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information

Application No.: 10/578581 Docket No.: 023949,0104PTUS

Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-2816, under Order No. 023949.0104PTUS. A duplicate copy of this paper is enclosed.

Dated: August 1, 2006

Respectfully submitted,

By CATULE
Robert C. Hilton
Registration No.: 47,649
PATTON BOGGS LLP
2001 Ross Avenue, Suite 3000
Dallas, Texas 75201
(214) 758-6641
(214) 758-1550 (Fax)
Attorney for Applicant

PTO/SB/08a/b (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. OEPARTMENT OF COMMERCE

k Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Complete If Known m 1449A/B/PTO Application Number 10/578581 INFORMATION DISCLOSURE Filing Oate May 5, 2006 STATEMENT BY APPLICANT First Named Inventor Chaogiang Liu N/A Art I Init (Use as many sheets as necessary) Not Yet Assigned Examiner Name Sheet Attorney Docket Number 023949.0104PTUS 1 of 1

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
/JC/_	AA*	US-5,778,092-A	07-07-1998	MacLeod et al.			
1	AB*	US-5,778,095-A	07-07-1998	Davies			
W	AC*	US-6,324,305-A1	11-27-2001	Holladay et al.			
W	AD*	US-6,163,625-A	12-19-2000	Ng et al.			
/IC/	AE*	US-5,392,362-A	02-21-1995	Kimura et al.			

FOREIGN PATENT DOCUMENTS							
Examiner initiats*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Occument	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т	
154	BA	EP-EP 0 713 329	05-22-1996	XEROX CORPORATION		4	

"EXAMINE: Initial irreference considered, whather or not classion is a conformance with IMEP 690. Over the through classion if not in conformance and not considered. Include copy of the form which nect communication as applicant, "OTER 050, "Done opplication will be form the strips attention to the CIR. No. over not supplied (under 37 CFR 1586/2799) because that application was filed after June 30, 2003 or is available in his PVM. "Applicant in unique stations designed number (political)." See Neider Close of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close she also stated unique stations designed number (political). "See Neider Close of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close she also stated unique stated in the political state of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close of USPTO Pleater Comments at yoursuppage or MPPF 9016." The Total Close of USPTO Pleater Comments at your section of the Seeder Comments and the Seeder Co

	NON PATENT LITERATURE DOCUMENTS				
Examiner Cite Include mag		ude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, agazine, journat, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
/JC/	CA	J. Li et al, Context-Based Multiscale Classification of Document Images Using Wavelet Coefficient Distributions IEEE Transactions on Image Processing, Spetember 2000, Vol. 9, No. 9 http://www.stanford.edu/group/compression/publications/gail/dicoseg.pdf			
/JC/	СВ	R. de Queiroz et al, Mixed Raster Content (MRC) Model for Compound Image Compression Proc. IS&T/SPIE Symposium on Electronic Imaging, Visual Communications and Image Processing, 1999, pp. 1106-17; http://queiroz.lab.unb.br/papers/ej99mrc.pdf			
/JC/	СС	WDIC - Wavelet-Based Document Image Compression, as archived on 22 February 2002 http://web.archive.org/web/20020422002439/www.cwaip.nus.edu.sg/demo/wdic.htm			
/JC/	CD	Gary E. Kopec et al., Document-Specific Character Template Estimation; Proc. SPIE Document Recognition III, 1996, pp. 14-26, http://www2.parc.com/istl/members/kopec/spie—96-cte.pdf.			
/JC/	CE	Amir Said et al.; A New Fast and Efficient Image Codec Based on Set Patitioning in Hierarchical Trees, IEEE Trans on Circuits and Systems for Video Technology; Vol. 6, No. 3; June 1999; pp. 243-250.			
/JC/	CF	Wei Gong et al.; Shape and Image Matching by Use of Morphology; Proc. 11th Int. Conf. on Pattern Recognition; Vol. 2; The Hague, The Netherlands, 1992; pp. 673-676.			
/JC	CG	J.M. Shapiro, Embedded Image Coding Using Zerotress of Wavelet Coefficients; IEEE Trans. On Signal Processing, Vol. 1, No. 12; December 1993; pp. 3445-3426.			
/JC/	СН	International Search Report dated January 10, 2005 from the ISA/AU for PCT/SG2004/000366.			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

'Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English languaga Translation is attached.

Examiner | /Jose Couso/ | Date | Considered | 02/23/2009



BFW graye

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

## Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/578581 Filing Date TRANSMITTAL May 5, 2006 First Named Inventor **FORM** Chaogiang Liu Art Unit N/A (to be used for all correspondence after initial filling) Examiner Name Not Yet Assigned Attorney Docket Number Total Number of Pages in This Submission 023949.0104PTUS ENCLOSURES (Check all that apply) After Allowance Communication Fee Transmittal Form Drawing(s) Appeal Communication to Board of Fee Attached Licensing-related Papers Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) mendment/Reply Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address X Other Enclosure(s) (please identify below): Extension of Time Request Terminal Disclaimer Copy of Non Patent Literature Express Abandonment Request Request for Refund Documents; and Return Receipt Postcard. Information Disclosure Statement CD, Number of CD(s) Certified Copy of Priority Landscape Table on CD Document(s) Reply to Missing Parts/ Remarks Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name PATTON BOGGS LLP Signature Printed name Robert C. Hilton Date August 1, 2006 47,649

I hereby certify that this paper (along with any paper referred to the date shown below with sufficient postage as First Class Mai Alexandria: VA 22313-1450.	as being attached or enclosed) is being deposited with the U.S. Postal Service on il, in an envelope addressed to: Commissione, for Patents, P.O. Box 1450,
Dated:AUGUST 1, 2006	Signature: All Hill Hargrove)